

=====

Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866)
217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: [year=2007; month=12; day=7; hr=16; min=28; sec=25; ms=294;]

=====

Application No: 10563134 Version No: 1.0

Input Set:**Output Set:**

Started: 2007-12-03 11:40:28.241
Finished: 2007-12-03 11:40:36.583
Elapsed: 0 hr(s) 0 min(s) 8 sec(s) 342 ms
Total Warnings: 39
Total Errors: 0
No. of SeqIDs Defined: 39
Actual SeqID Count: 39

Error code	Error Description
W 402	Undefined organism found in <213> in SEQ ID (1)
W 402	Undefined organism found in <213> in SEQ ID (2)
W 402	Undefined organism found in <213> in SEQ ID (3)
W 402	Undefined organism found in <213> in SEQ ID (4)
W 402	Undefined organism found in <213> in SEQ ID (5)
W 402	Undefined organism found in <213> in SEQ ID (6)
W 402	Undefined organism found in <213> in SEQ ID (7)
W 402	Undefined organism found in <213> in SEQ ID (8)
W 402	Undefined organism found in <213> in SEQ ID (9)
W 402	Undefined organism found in <213> in SEQ ID (10)
W 402	Undefined organism found in <213> in SEQ ID (11)
W 402	Undefined organism found in <213> in SEQ ID (12)
W 402	Undefined organism found in <213> in SEQ ID (13)
W 402	Undefined organism found in <213> in SEQ ID (14)
W 402	Undefined organism found in <213> in SEQ ID (15)
W 402	Undefined organism found in <213> in SEQ ID (16)
W 402	Undefined organism found in <213> in SEQ ID (17)
W 402	Undefined organism found in <213> in SEQ ID (18)
W 402	Undefined organism found in <213> in SEQ ID (19)
W 402	Undefined organism found in <213> in SEQ ID (20)

Input Set:

Output Set:

Started: 2007-12-03 11:40:28.241
Finished: 2007-12-03 11:40:36.583
Elapsed: 0 hr(s) 0 min(s) 8 sec(s) 342 ms
Total Warnings: 39
Total Errors: 0
No. of SeqIDs Defined: 39
Actual SeqID Count: 39

Error code	Error Description
	This error has occurred more than 20 times, will not be displayed
W 213	Artificial or Unknown found in <213> in SEQ ID (31)
W 213	Artificial or Unknown found in <213> in SEQ ID (32)
W 213	Artificial or Unknown found in <213> in SEQ ID (33)
W 213	Artificial or Unknown found in <213> in SEQ ID (34)
W 213	Artificial or Unknown found in <213> in SEQ ID (35)
W 213	Artificial or Unknown found in <213> in SEQ ID (36)
W 213	Artificial or Unknown found in <213> in SEQ ID (37)
W 213	Artificial or Unknown found in <213> in SEQ ID (39)

SEQUENCE LISTING

<110> Chemin, Isabelle
Trepo, Christian

<120> Nucleic Acid and Protein Sequences from the HXHV Virus and Uses
Thereof

<130> 126542

<140> 10563134

<141> 2007-12-03

<150> PCT/FR2004/050310

<151> 2004-07-05

<160> 39

<170> PatentIn version 3.3

<210> 1

<211> 1362

<212> DNA

<213> Hepatitis X Related Virus

<400> 1

actaccaaca gatcctcgac gaactgcgcc aggaactggc cgagcactac ctgctgcgca	60
gcgacctggc gatccaggat atcgctgct acctcggttt caccgagtca cgctcggtcc	120
accgcagttt caagagctgg accgggcaga cgccgggcga gtttcgcgag agccgggcgc	180
gggataatcc gctgggctag cgcgatatgg ccggaaacgc cgtgccagcc agtagtcgag	240
actcaaccat cgccccgcc cgctgatgaa aagcgccacg agcgagcca cgcccgccac	300
cggtgaggtt tgccaatggc atatcagtc tcccgcgcc cttactcgtt cttatcgcca	360
ctgcacgtgc cttcaatacg ggagccttcc tgcgccttct cggcagcggc caggctgtag	420
ccgccggcca gttcctgctc agcgaagggg atgctagtgg cgtgggcagt gaacgccatg	480
taactcggca gtgcagcgcc ctagggctctg ttgccgtttc gcgcacggcc gcgtcgaaac	540
ggcaacagac cctaggtggc agtcagggta ttggcatctc tccatcgggt tcgaatacgg	600
cgccaggttg gcgcctcgc agcaatggac gaggcaggga tgcgggcgtt acagcgggcg	660
aaaaagattt ctcgtagccc gatgaaatac gggggcgctt tgcctgccag caatcgcggc	720
tacgactgca tggacgcagg aggtagagcg aagcaggatg vvagagcaga aagctctctc	780
ccacagacac agaaacatcc accgcacggc aggaggtgat tcaaatgatc aggcacatcc	840
tctggttga ctgcatggc gctgcgagca cgggcgttgt ggttctgttg ctggccccc	900

tggttgagcg gctggatatgc cctgcccggc gagctgctga gcttcatcgg cgcgatcaat	960
atcgccctacg cctgcttttc catttcgctg gcgattcgcc tgcgacgcgc cgaagcgcta	1020
atcaagctgc tggcagtggc caacggactc tgggcggttg catgccttgg catcgctacg	1080
atctttgccc cgctcatgac gctaccgggg ctttgtcatg tgctcggcga ggctgcatcc	1140
gtcgcaggcc tgggcatgct ggagtggaaa tggcgcaggc agctgctggt ggctggcgaa	1200
cagggcgttt cgactcagct tgtcgcggtc cagtaaccgt cacaggtatt caggcgaaga	1260
tccggcgatg gctgttcagg ccatcatcag ccctatcctt cagccctgtg aaagcggttc	1320
ttgcccgcggt gcttggccgc gtacctcggc cccgaccacg ct	1362

<210> 2
 <211> 562
 <212> DNA
 <213> Hepatitis X Related Virus

<400> 2	
tagtcgagac tcaaccatcg ctcccgcccc gctgatgaaa aggtcgctcg gctcaagcgc	60
gaactgtcgc gtgttaccaa ggaacgagat tttttacgag acgcggcagc gtacttcgcg	120
aagcaatcgc cgaacggtag gcggtgatcg agcgtgccg cagcgactac cccattggga	180
tgatgtgccg ctgccttcaa gtgtcgacca gtgggttcta cgctggggc aggcgaaagc	240
cggggccgcg tgcccaggcg aattcgcgtc tcttgagcgc catgcgtgaa atccacgagg	300
acagccgagg catcatcggc gcgcgtcgga tgcaggaaga cctcgccgac gaaggcatgc	360
cgcgcagctt gaatcgggtg gccgcgctca tggccaaggc cgggcttcag ggctggccgc	420
ggcgaaagaa gcgtggcttt ccgcgcaagc cgccgacgcg tcgtcccag ggcgtcagga	480
accttctgga gagggatttc tcggcgctcg aaccggagac gaagtgggta accgacatca	540
ccgagatcgt caccgacgag gg	562

<210> 3
 <211> 571
 <212> DNA
 <213> Hepatitis X Related Virus

<400> 3	
taccagaagt tcctcggcag ccatgccttg gtctgcagca tgagcgaggt cggccattgc	60
ggcgacaacg cagcatgtga gggattcttc gggctactga agcgagagt gatctaccaa	120
accgcctaca gcacaagaag ggaagctcgg gccgacgtct ttgcctacct ggagcggttc	180
cacgaccgcg ggatgcgccg tagagttgcg aggcgtgacc gggagtttca agccttaatc	240

aaaccgtccg cggaacggg gtagaacccg agtccactta ccgccggtgc ggcgaggtc	300
gccgccccac accacgcagg ttaagtcgag ttccgaacct tgcacctgaa actcagtggc	360
gacgtcttcg aggtagtacg acgtcttcgc ggtgatacaa gaaacgtgtg tctccttcg	420
cggccaaaag ccaactggata aggtcgacct ttaagcgcac tcccatagcg tactgggacc	480
cctgatgccg aggcacgaag tagcaggtaa catcgtgtca tgcacaagca atcggatcat	540
gtcgtctcgc tcttttcacg agcggggcgg g	571

<210> 4
 <211> 1314
 <212> DNA
 <213> Hepatitis X Related Virus

<400> 4	
tagtcgagac tcaaccatcg ctcccgcccc gctgatgaaa aggtcgctcg gctcaagcgc	60
gaactgtcgc gtgttaccaa ggaacgagat tttttacgag acgcggcagc gtacttcgcg	120
aagcaatcgc cgaacggtac gcggtgatcg agcgtgcgc cagcgactac cccattggga	180
tgatgtgccg ctgccttcaa gtgtcgacca gtgggttcta cgcctgggcc aggcgaaaagc	240
cggggccgcg tgcccaggcg aattcgcgtc tcttgagcgc catgcgtgaa atccacgagg	300
acagccgagg catcatcggc gcgcgtcgga tgcaggaaga cctcgccgac gaaggcatgc	360
ccgccagctt gaatcgggtg gcccgcgtca tggccaaggc cgggcttcag ggctggccgc	420
ggcgaaagaa gcgtggcttt ccgcgcaagc cgcgcagcgc tcgtcccagc ggcgtcagga	480
accttctgga gagggatttc tcggcgctcg aaccggagac gaagtgggta accgacatca	540
ccgagatcgt caccgacgag ggaaaactcc atctctgcgt cgtcctcgac ctgtacagca	600
aactcatcat gggatggtcg atgcatcacc ggcaggatcg ccacatggtg gttcgcgcgg	660
tacagatggc ggtttggcag cgcgagggcg gcgacgaggt gatcctgcat tccgatcgcg	720
gcgggcagtt catcagcgat acgtaccaga agttcctcgg cagccatgcc ttggctctga	780
gcatgagcga ggtcggccat tgccggcgaca acgcagcatg tgagggattc ttcgggctac	840
tgaagcgaga gtggatctac caaacccgct acagcacaag aagggaagct cgggccgacg	900
tctttgccta cctggagcgg ttccacgacc cgcggatgcg ccgtagagtt gcgaggcgtg	960
accgggagtt tcaagcctta atcaaaccgt ccgcggaaac ggggtagaac ccgagtccac	1020
ttaccgcccg tgccggcgag gtcgccgccc cacaccacgc aggttaagtc gagttccgaa	1080
ccctgcacct gaaactcagt ggcgacgtct tcgaggtagt acgacgtctt cgcggtgata	1140

caagaaacgt gtgtcctcct tgccggccaa aagccactgg ataaggtcga cctttaagcg	1200
cattcccata gcgtactggg acccctgatg ccgaggcacg aagtagcagg taacatcgtg	1260
tcatgcacaa gcaatcggat catgtcgtct cgctcttttc atgagcgggg cggg	1314

<210> 5
 <211> 285
 <212> DNA
 <213> Hepatitis X Related Virus

<400> 5	
agtcgagact caaccatcgc tcccgcctcg ctgatgaaaa ggtcgctcgg ctcaagcgcg	60
aactgtcgcg tgttaccaag gaacgagatt ttttacgaga cgcggcagcg tacttcgcga	120
agcaatcggc gaacggtacg cgggtgatcga gcgctgccgc agcgactacc ccattgggat	180
gatgtgccgc tgccttcaag tgtcgaccag tgggttctac gcctgggcca ggcgaaagcc	240
ggggccgcgt gccaggcga attcgcgtct cttggagcgc atgcg	285

<210> 6
 <211> 141
 <212> DNA
 <213> Hepatitis X Related Virus

<400> 6	
tcgagactca accatcgtc ccgccccgct gatgaaaagg tcgctcggt caagcgcgaa	60
ctgtcgcgtg ttaccaagga acgagatttt ttacgagacg cggcagcgta cttcgcgaag	120
caatcgccga acggtacgcg g	141

<210> 7
 <211> 825
 <212> DNA
 <213> Hepatitis X Related Virus

<400> 7	
atgatgtgcc gctgccttca agtgtcgacc agtgggttct acgcctgggc caggcgaaag	60
ccggggccgc gtgccaggc gaattcgcgt ctcttgagc gcatgcgtga aatccacgag	120
gacagccgag gcacatcgg cgcgcgtcgg atgcaggaag acctcgccga cgaaggcatg	180
cccgccagct tgaatcgggt ggcccgctc atggccaagg ccgggcttca gggctggccg	240
cggcgaaaga agcgtggctt tccgcgcaag ccgcccgcgc gtcgtcccga gggcgtcagg	300
aaccttctgg agagggattt ctcggcgctc gaaccggaga cgaagtgggt aaccgacatc	360
accgagatcg tcaccgacga gggaaaactc catctctgcg tcgtcctcga cctgtacagc	420

aaactcatca tgggatggc gatgcatcac cggcaggatc gccacatggt ggttcgcgcg	480
gtacagatgg cggtttggca gcgcgagggc ggcgacgagg tgatcctgca ttccgatcgc	540
ggcgggcagt tcatcagcga tacgtaccag aagttcctcg gcagccatgc cttggtctgc	600
agcatgagcg aggtcggcca ttgcggcgac aacgcagcat gtgagggatt cttcgggcta	660
ctgaagcgag agtggatcta ccaaaccgc tacagcacia gaagggaagc tcgggccgac	720
gtctttgcct acctggagcg gttccacgac ccgcggatgc gccgtagagt tgcgaggcgt	780
gaccgggagt ttcaagcctt aatcaaaccg tccgcggaaa cgggg	825

<210> 8
 <211> 207
 <212> DNA
 <213> Hepatitis X Related Virus

<400> 8	
atggtcgaatg catcaccggc aggatcgcca catggtggtt cgcgcggtac agatggcgg	60
ttggcagcgc gagggcggcg acgaggtgat cctgcattcc gatcgcggcg ggcagttcat	120
cagcgatacg taccagaagt tcctcggcag ccatgccttg gtctgcagca tgagcgaggt	180
cggccattgc ggcgacaacg cagcatg	207

<210> 9
 <211> 87
 <212> DNA
 <213> Hepatitis X Related Virus

<400> 9	
atgccgaggc acgaagtagc aggtaacatc gtgtcatgca caagcaatcg gatcatgtcg	60
tctcgtctctt ttcatgagcg gggcggg	87

<210> 10
 <211> 87
 <212> DNA
 <213> Hepatitis X Related Virus

<400> 10	
agcgcattcc catagcgtac tgggaccct gatgccgagg cacgaagtag caggtaacat	60
cgtgtcatgc acaagcaatc ggatcat	87

<210> 11
 <211> 198
 <212> DNA
 <213> Hepatitis X Related Virus

<400> 11
 agtcgagttc cgaaccctgc acctgaaact cagtggcgac gtcttcgagg tagtacgacg 60
 tcttcgcggt gatacaagaa acgtgtgtcc tccttgccgg ccaaaagcca ctggataagg 120
 tcgaccttta agcgcatcct catagcgtag tgggacctct gatgccgagg cacgaagtag 180
 caggtaacat cgtgtcat 198

<210> 12
 <211> 111
 <212> DNA
 <213> Hepatitis X Related Virus

<400> 12
 gtggcgacgt cttcgaggta gtacgacgtc ttcgcggtga tacaagaaac gtgtgtcctc 60
 cttgccggcc aaaagccact ggataaggtc gacctttaag cgcatccca t 111

<210> 13
 <211> 84
 <212> DNA
 <213> Hepatitis X Related Virus

<400> 13
 gcgatacgta ccagaagttc ctcggcagcc atgccttggc ctgcagcatg agcgaggtcg 60
 gccattgcgg cgacaacgca gcat 84

<210> 14
 <211> 795
 <212> DNA
 <213> Hepatitis X Related Virus

<400> 14
 gagactcaac catcgctccc gccccgctga tgaaaaggtc gctcggctca agcgcgaaact 60
 gtcgcgtgtt accaaggaac gagatTTTTT acgagacgcg gcagcgtagt tcgcgaagca 120
 atcgccgaac ggtacgcggt gatcgagcgc tgccgcagcg actaccccat tgggatgatg 180
 tgccgctgcc ttcaagtgtc gaccagtggg ttctacgctt gggccaggcg aaagccgggg 240
 ccgctgtccc aggcgaattc gcgtctcttg gagcgcagtc gtgaaatcca cgaggacagc 300
 cgaggcatca tcggcgcgcg tcggatgcag gaagacctcg ccgacgaagg catgcccgcc 360
 agcttgaatc ggggtggccc cgctcatggc aaggccgggc ttcagggtcg gccgcggcga 420
 aagaagcgtg gctttccgcg caagccgccc acgcgtcgtc ccgagggcgt caggaacctt 480
 ctggagaggg atttctcgcc gctcgaaccg gagacgaagt gggtaaccga catcaccgag 540

atcgtcaccg acgagggaaa actccatctc tgcgtcgctc tcgacctgta cagcaaactc	600
atcatgggat ggtcgatgca tcaccggcag gatcgccaca tggtaggttcg cgcggtacag	660
atggcggttt ggcagcgca gggcggcgac gaggtgatcc tgcattccga tcgcggcggg	720
cagttcatca ggcatacgtg ccagaagttc ctcggcagcc atgccttggc ctgcagcatg	780
agcgaggtcg gccat	795

<210> 15
 <211> 156
 <212> DNA
 <213> Hepatitis X Related Virus

<400> 15	
cggcgaggat cgccacatgg tggttcgcg cgtacagatg gcggtttggc agcgcgaggg	60
cggcgacgag gtgatcctgc attccgatcg cggcgggcag ttcatacagc atacgtacca	120
gaagttcctc ggcagccatg ccttggtctg cagcat	156

<210> 16
 <211> 201
 <212> DNA
 <213> Hepatitis X Related Virus

<400> 16	
gggctggccg cggcgaaaga agcgtggctt tccgcgcaag ccgccgacgc gtcgtcccga	60
gggctgcagg aaccttctgg agagggattt ctcggcgctc gaaccggaga cgaagtgggt	120
aaccgacatc accgagatcg tcaccgacga gggaaaactc catctctcg tctcctcga	180
cctgtacagc aaactcatca t	201

<210> 17
 <211> 171
 <212> DNA
 <213> Hepatitis X Related Virus

<400> 17	
cgcctgggcc aggcgaaagc cggggccgcg tgcccaggcg aattcgcgct tcttgagcgc	60
catgcgtgaa atccacgagg acagccgagg catcatcggc gcgcgtcggg tgcaggaaga	120
cctcgccgac gaaggcatgc ccgccagctt gaatcggtg gccgcgctca t	171

<210> 18
 <211> 95
 <212> PRT
 <213> Hepatitis X Related Virus

<400> 18

Ser Arg Asp Ser Thr Ile Ala Pro Ala Pro Leu Met Lys Arg Ser Leu
1 5 10 15

Gly Ser Ser Ala Asn Cys Arg Val Leu Pro Arg Asn Glu Ile Phe Tyr
20 25 30

Glu Thr Arg Gln Arg Thr Ser Arg Ser Asn Arg Arg Thr Val Arg Gly
35 40 45

Asp Arg Ala Leu Pro Gln Arg Leu Pro His Trp Asp Asp Val Pro Leu
50 55 60

Pro Ser Ser Val Asp Gln Trp Val Leu Arg Leu Gly Gln Ala Lys Ala
65 70 75 80

Gly Ala Ala Cys Pro Gly Glu Phe Ala Ser Leu Gly Ala His Ala
85 90 95

<210> 19

<211> 47

<212> PRT

<213> Hepatitis X Related Virus

<400> 19

Ser Arg Leu Asn His Arg Ser Arg Pro Ala Asp Glu Lys Val Ala Arg
1 5 10 15

Leu Lys Arg Glu Leu Ser Arg Val Thr Lys Glu Arg Asp Phe Leu Arg
20 25 30

Asp Ala Ala Ala Tyr Phe Ala Lys Gln Ser Pro Asn Gly Thr Arg
35 40 45

<210> 20

<211> 275

<212> PRT

<213> Hepatitis X Related Virus

<400> 20

Met Met Cys Arg Cys Leu Gln Val Ser Thr Ser Gly Phe Tyr Ala Trp
1 5 10 15

Ala Arg Arg Lys Pro Gly Pro Arg Ala Gln Ala Asn Ser Arg Leu Leu

20

25

30

Glu Arg Met Arg Glu Ile His Glu Asp Ser Arg Gly Ile Ile Gly Ala
 35 40 45

Arg Arg Met Gln Glu Asp Leu Ala Asp Glu Gly Met Pro Ala Ser Leu
 50 55 60

Asn Arg Val Ala Arg Val Met Ala Lys Ala Gly Leu Gln Gly Trp Pro
 65 70 75 80

Arg Arg Lys Lys Arg Gly Phe Pro Arg Lys Pro Pro Thr Arg Arg Pro
 85 90 95

Glu Gly Val Arg Asn Leu Leu Glu Arg Asp Phe Ser Ala Leu Glu Pro
 100 105 110

Glu Thr Lys Trp Val Thr Asp Ile Thr Glu Ile Val Thr Asp Glu Gly
 115 120 125

Lys Leu His Leu Cys Val Val Leu Asp Leu Tyr Ser Lys Leu Ile Met
 130 135 140

Gly Trp Ser Met His His Arg Gln Asp Arg His Met Val Val Arg Ala
 145 150 155 160

Val Gln Met Ala Val Trp Gln Arg Glu Gly Gly Asp Glu Val Ile Leu
 165 170 175

His Ser Asp Arg Gly Gly Gln Phe Ile Ser Asp Thr Tyr Gln Lys Phe
 180 185 190

Leu Gly Ser His Ala Leu Val Cys Ser Met Ser Glu Val Gly His Cys
 195 200 205

Gly Asp Asn Ala Ala Cys Glu Gly Phe Phe Gly Leu Leu Lys Arg Glu
 210 215 220

Trp Ile Tyr Gln Thr Arg Tyr Ser Thr Arg Arg Glu Ala Arg Ala Asp
 225 230 235 240

Val Phe Ala Tyr Leu Glu Arg Phe His Asp Pro Arg Met Arg Arg Arg
 245 250 255

Val Ala Arg Arg Asp Arg Glu Phe Gln Ala Leu Ile Lys Pro Ser Ala
260 265 270

Glu Thr Gly
275

<210> 21
<211> 69
<212> PRT
<213> Hepatitis X Related Virus

<400> 21

Met Val Asp Ala Ser Pro Ala Gly Ser Pro His Gly Gly Ser Arg Gly
1 5 10 15

Thr Asp Gly Gly Leu Ala Ala Arg Gly Arg Arg Arg Gly Asp Pro Ala
20 25 30

Phe Arg Ser Arg Arg Ala Val His Gln Arg Tyr Val Pro Glu Val Pro
35 40 45

Arg Gln Pro Cys Leu Gly Leu Gln His Glu Arg Gly Arg Pro Leu Arg
50 55 60

Arg Gln Arg Ser Met
65

<210> 22
<211> 29
<212> PRT
<213> Hepatitis X Related Virus

<400> 22

Met Pro Arg His Glu Val Ala Gly Asn Ile Val Ser Cys Thr Ser Asn
1 5 10 15

Arg Ile Met Ser Ser Arg Ser Phe His Glu Arg Gly Gly
20 25

<210> 23
<211> 29
<212> PRT
<213> Hepatitis X Related Virus

<400> 23

Arg Cys Glu Trp Leu Thr Ser Pro Gly Arg Ile Gly Leu Cys Ser Thr
1 5 10 15

Ala Pro Leu Met Thr Asp His Val Leu Leu Arg Ile Met
20 25

<210> 24

<211> 66

<212> PRT

<213> Hepatitis X Related Virus

<400> 24

Thr Ser Asn Arg Val Arg Cys Arg Phe Ser Leu Pro Ser Thr Lys Ser
1 5 10 15

Thr Thr Arg Arg Arg Arg Pro Ser Val Leu Phe Thr His Gly Gly Gln
20 25 30

Arg Gly Phe Ala Val Pro Tyr Pro Arg Gly Lys Leu Ala Asn Gly Tyr
35 40 45

Arg Val Pro Val Gly Ser Ala Ser Ala Arg Leu Leu Leu Tyr Cys Arg
50 55 60

Thr Met
65

<210> 25

<211> 37

<212> PRT

<213> Hepatitis X Related Virus

<400> 25

His Arg Arg Arg Arg Pro Leu Val Val Asp Glu Arg His Tyr Leu Phe
1 5 10 15

Arg Thr Asp Glu Lys Gly Ala Leu Leu Trp Gln Ile Leu Asp Val Lys
20 25 30

Leu Arg Met Gly Met
35

<210> 26

<211> 28
<212> PRT
<213> Hepatitis X Related Virus

<400> 26

Arg Tyr Thr Gly Ser Thr Gly Arg Cys Gly His Arg Pro Arg Cys Cys
1